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ABSTRACT

A reading program to raise the achievement level of disadvantaged children is evaluated. The evaluation is intended to help Montgomery County Schools in determining the effectiveness of its Title I Program and to help the State Department of Education attain a view of Title I programs in Virginia so that both agencies can plan a more effective approach to compensatory education in the future. Descriptions are given of the community, the children, and the program included under the Title I project. Two types of evaluation are reported: (1) performance objectives as measured by standardized tests and (2) achievement, attitudes, and behavior evaluated by reading and classroom teachers in reports and comments recorded in cumulative record data. Facts and figures relating to the budget and school attendance are also presented. The report is concluded with a summary of the project and recommendations limited by problems encountered in the study. Tables are included. (Author/DH)

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Evaluation of the

TITLE I READING PROGRAM in Montgomery County, Virginia, Schools

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EVALUATION OF THE TITLE I READING PROGRAM IN MONTGOMERY COUNTY, VIRGINIA SCHOOLS

December 31, 1969

The above research project has been authorized through Virginia Polytechnic Institute, Research Division.

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INTRODUCTION

In recent studies of the problems of culturally depressed areas it was found that the most important factor affecting change in the lives of people from these areas was education. Until schools provide the children in depressed areas with the necessary skills and understanding to cope successfully with a highly competitive society the aforementioned problems will not be solved.

With the passage of the Elementary and Secondary Educational Act in 1965, more funds became available to develop compensatory programs. In-depth research is being pursued which should help us learn where our educational systems are failing the disadvantaged and provide clues to better ways of educating the non-disadvantaged.

It has been found that failure in the basic skills in the early grades leads to defeat and aids in developing a negative self concept. (Martin Deutsch, "Some Psychosocial Aspects of Learning in the Disadvantaged", Teachers College Record, 1966.) Academic achievement in the early elementary grades, or the lack of it, shapes the destiny of the child as an achiever or non-achiever. Many students who meet with repeated failure merely mark time until they no longer are required to attend school. They meet failure again when they try to obtain work which requires skills they have not mastered.

The disadvantaged child brings a variety of handicaps into the school. Among these is a language deficiency which affects his reading ability. It also affects his interpretation of what teachers are saying and his ability to follow directions. The reading problem has long been identified as one of the basic deterrents to academic success.

The Montgomery County School system had a large percent of the elementary children in its system reading a year or more below grade level. In an effort to raise the level of achievement in reading it applied for federal assistance. A reading program was established and implemented in 1966. Since that time it has continued to function from funds under Title I of the Elementary and Secondary Education Act.

For the school to assume its full responsibility in such a program constant self-criticism and self-evaluation is required. In the summer of 1969 an evaluation agreement was entered between the Education Department of Virginia Polytechnic Institute and the Montgomery County School System. Members of the Department of Education faculty were procured for the purpose of measuring the effectiveness of the Montgomery County Educational System Reading Program in attaining project objectives. An effort was made to measure pupil changes that occurred as a result of the reading program. Hopefully the evaluation will contribute to a more appropriate diagnosis of pupil needs, a plan of educational activities based on pupil background, more clearly defined educational goals and a modification of project activities where indicated. In conclusion the evaluation is intended to help Montgomery County Schools in determining effectiveness of its Title I Program, and to help the State Department of Education attain a view of Title I programs in Virginia so that both agencies can plan a more effective approach to compensatory education in the future.

The final approval of funds for this evaluation was not received until late in the 1968-69 year. Because of this, rigorous research methods could not be employed. It was not possible to set up procedures for measurement at the beginning of the year, nor to directly observe classrooms or Title I reading sessions during the 1968-69 school year. The evaluation, therefore, is limited because of its post facto nature. To a large extent it is only descriptive of what conditions exist. The reader is cautioned not to make unwarranted conclusions.

CHAPTER I

DESCRIPTION OF THE COMMUNITY SERVED BY THE TITLE I PROJECT

The schools served by the Title I Project were technically designated as economically and culturally deprived on the basis of a high proportion of student families' having a yearly income of less than $2,000. There were eleven of the fourteen schools in Montgomery County which qualified for Title I assistance.

Montgomery County lies in the southwest area of the state of Virginia and has a population of approximately 40,000. Industry is rapidly becoming the main source of income, replacing agriculture and mining. Radford Army Ammunition Plant, Corning Glass, and a variety of smaller plants employ skilled and unskilled workers.

Many parents whose children participate in the Title I project are unskilled workers or laborers in industry; a small percent are farmers and white collar workers (clerks, salesmen, etc). A few are professionals. In most families both parents are living within the household, but the income is too low to provide adequate food and clothing. In one case the father is in jail most of the time for nonsupport; in another case, the father is deceased and the mother tries to support fourteen children by working as a maid. A small percentage of the students in the target schools are from families with adequate incomes but nevertheless are considered culturally or educationally disadvantaged.

Living conditions range from very adequate self-owned housing to overcrowded, unhygienic, depressed and rental housing. In such an environment academic learning frequently is not perceived as relevant to the family's struggle for existence.

Community Influences

Organizations and agencies in the community which assist students include Helping Hand, Montgomery County Health Department, Welfare, Community Action Committee, Juvenile Court, University of Virginia Hearing and Speech Foundation, area Community Clothing Banks, Lions Club, Neighborhood Youth Corps, Job Core, and Mountain Empire Mental Health Clinic. Girl Scouts and Boy Scouts are active in some school areas.

In addition, children attend churches. A considerable number of families belong to a small religious sect which predicts that the end of the world is near. One child announced to his teacher that getting an education was not going to do him any good because the world was coming to an end. Education is not considered important to children with such attitudes.

CHAPTER II

TITLE I IN MONTGOMERY COUNTY

Needs

The local school system became concerned with its retention rate for the 1966-67 school year. In grades one through three there were 150 students retained out of a total 2,127; that is 8.06% in first grade, 6.14% in the second grade, and 6.76% in the third.

In September, 1967, the Metropolitan Reading Readiness test was administered to all children entering the first grade. The results of this testing revealed that 36% or 265 children of the 732 enrolled ranked in the "D" and "E" category. In order to achieve success in the first grade, further work in readiness and an individualized reading program was indicated as essential.

Fourth grade students were given the SRA Achievement test in March, 1968. Two hundred of the 634 children tested, 31%, scored at least one year or more below their grade placement level. The Iowa Silent Reading Test was administered to the seventh grades in the spring of 1967. Four of the nine schools tested placed below the national norm in total grade placement.

In 1960-61 the drop-out rate was 5% of the high school enrollment in Montgomery County. During this period the rate was lower than the state rate which was 5.5%. Five years later, however, the Montgomery County drop-out rate had increased to 6.9% while the state rate had dropped to 4.7%.

Since there was reason to believe the high drop-out rate in high school was due in part to a reading deficiency in students, a need for raising reading skills of students was viewed as essential.

Planning the Program

The faculty of each school discussed the needs of their children and made suggestions as to how these needs might be met. Principals and members of the central office staff engaged in several planning sessions to formulate a Title I program. In view of the rising drop-out rate and the fact that large percentages of children were reading a year or more below their grade placement, it was decided that an enrichment program in reading would best meet the needs of the students, not only for improving basic reading skills, but for improving achievement in other areas. It was hoped that, concommitant with academic success, the rate of drop-outs would decline. The following objective for the Title I program was formulated:

> To reinforce and supplement the regular reading program of the educationally deprived children residing in the areas served by the target schools.

Scope

Survey forms were sent home with each child in all county schools. On the form was a brief explanatory statement such as "The purpose of this is to help Montgomery County qualify for Federal funds for additional projects in our schools." In reference to annual income parents were requested to check one of three blocks: (1) below $2,000 per year income (2) $2,000 to $5,000 (3) over $5,000 per year income. The form was returned unsigned in a sealed envelope.

The return was 87.2% on these forms. An analysis found that 999 children (11.8%) were from low income families of 8,466 enrolled. Target schools were designated according to the percent of children attending from low income families. Eleven of the fourteen schools in the county system qualified for the Title I program.

Once funds were obtained under Title I of the Elementary and Secondary Educational Act it was decided that the reading program should be concentrated in the early elementary grades. Students in the later elementary and secondary grades, however, upon recommendation of teachers, principals or supervisors, did receive special instruction in reading.

Students in the lower elementary grades were selected for participation on the basis of scores in the Metropolitan Reading Readiness Test. Children who scored "D" and "E" on the test were considered to be most likely to have difficulty in reading in the first grade.

Students in the upper elementary and in secondary school grades were selected by teachers, principals and supervisors on basis of test results and teacher evaluation. To qualify a student must score one year or more below his normal grade level. The Title I program was planned as a preventive process in the primary grades and as a remedial program in the upper grades. Primary emphasis was directed toward reading instruction in the early elementary grades, because of its effect on achievement in the upper grades. Thus an extensive remedial program at the upper grade levels might eventually be eliminated.

The total number of children from all schools enrolled in the Title I program during the year 1968-69 was 1,043. Of this number there were 290 children whose records were incomplete because of (1) transferring out of the county, (2) transferring to non-target schools within the county, (3) entering the program late, or (4) for some other reason, not completing test information. Complete records were available for 753 students.

CHAPTER III

DESCRIPTION OF TITLE I CHILDREN

Cognitive

Information on the cognitive abilities of Title I children came from (1) the pretests or Metropolitan Achievement tests administered to grades 2 through 9 and (2) intelligence tests. The Kuhlman-Anderson intelligence test is given in the second grade and the Lorge-Thorndike in the fourth grade.

All children entering first grade were given the Metropolitan Reading Readiness Test in September, 1968. Students scoring "D" and "E" and others whom the teachers felt needed supplementary help were enrolled in the Title I reading program.

Mental ability has always been considered one of the important factors in determining the ability to succeed in reading. Indeed it places a ceiling on achievement in any educational area. In fact, the level of mental development correlates even more highly with achievement in the later grades than it does in earlier ones. One of the disadvantages the children of Title I have is low I.Q. The mean I.Q. of the 3rd, 4th, 5th, 6th, 7th, 8th and 9th grades in this program is 83.5. See Table 1 for an analysis of student I.Q.'s.

According to the Merrill scale, the average participant in the reading program would operate two years below his chronological age and when he reached 10th grade would fall three years behind. Without doubt the need for special attention to such students is apparent.

TABLE 1

I.Q. OF STUDENTS IN GRADES 3, 4, 5, 6, 7, 8, 9

I.Q.	NUMBER
50-59	12
60-69	43
70-79	112
80-89	151
90-99	111
100-109	41
110-119	10
120-129	2

Mean I.Q. - 83.5

Behavioral

Certain behavioral information was obtained from cumulative records and teacher descriptions. Forty-five children from the Title I group were randomly selected for in-depth study. Information was collected from their cumulative records. Their teachers were interviewed for information about their attitude toward work, classroom behavior, attendance and other problems. For a summary description of the students see Table 2.

In toto very helpful comments were recorded by the classroom teachers and the reading teachers. However, there were three of the forty-five children for whom no description or comments had been made by the classroom teacher, and eight of the 45 had no comments made by the reading teacher. When asked their opinions about recording attitudes and behavior of students, some of the teachers commented that they had rather make no comment at all than to make a negative statement about a child on a permanent record.

Teachers described 21 (44%) of the children as immature. This high percentage is consistent with the findings on the low mental ages of this group. They further reported 14 (31%) were easily distracted and found difficulty in working in a large group setting. Some of these children day-dreamed or were occupied with activities of their own making.

Twelve of the 45 children (28%) lacked self-confidence. They were described as shy and lacking in the ability to communicate. The withdrawn students, of which there were eight (18%) had difficulty performing in large group situations. Eleven or 24% of the sample had poor attendance. Eighteen absences a

TABLE 2

BEHAVIOR AND ATTITUDES OF TITLE I STUDENTS

CHARACTERISTIC	NO. OF CASES	PERCENT
Immature	21	44
Easily Distracted	14	31
Lacks Self Confidence	12	28
Poor Attendance	11	24
Physical Disability	9	20
Withdrawn	8	18
Not Well Cared For	8	18
Lacks Interest in School	7	15
Fails to Finish Work	7	15
Poor Social Adjustment	5	11
Uncooperative	5	11
Parents Uncooperative	8	18

year is assumed to be excessive, and these eleven students missed from 18 to 43 days during the school year. At least 3 more students were absent 15 or 16 days. Of course some of these absences were due to illness. At times older children had to remain at home to care for younger children. Other absences might be traced to playing hooky without parents' knowledge, or with the knowledge of parents, who did not care enough to make the effort to get their children to school.

Nine (20%) of the 45 children had some type of physical disability. The majority of these were speech problems, ranging from slight to severe. Two had very poor muscular coordination.

Eight children (18%) were described as not receiving adequate care. Incidences of poor diet, undernourishment, inadequate clothing, and inadequate hygienic use were found. In some cases parents worked at night, and the children, left to care for their own sleep and food requirements, were tired and listless at school.

The number of children listed as lacking in interest was 7 or 15% of the sampling. Teachers reported the majority of the children "quite interested" or "tried hard" - - other problems however prevented success.

Seven children (15%) were listed as failing to finish their work. It is not known whether this failure was due to lack of interest, lack of knowledge, or just "slowness" in getting tasks done. Most of the children were described as friendly and capable of getting along with other children. Five students (11%) had problems in social adjustment.

Five (11%) were said to be uncooperative in the classroom, unable to accept authority; they presented behavioral problems from time to time. It appeared that the primary problem with these Title I children lay in their withdrawal and antisocial tendencies rather than in overt misbehavior.

The majority of parents seemed interested in the progress of their children but in 8 cases of the 45 (18%) parents were found to be uncooperative. They refused to visit the school for teacher conferences or were not interested in helping with the child's homework. A negative attitude on the part of the parent usually is soon reflected in the student.

Family Background

The questionnaires to obtain information on family income were sent to all parents involved in the county system. Since they were not to be signed, no information was available on the actual income of the Title I families.

Occupations of the parents, however, could be classified according to Caplows' The Sociology of Work, (1954, p. 36). There were 46% in "unskilled" and "semi-skilled" occupations, 18% "skilled-manual", 4% "white collar", 9% small business, and 11% classified as professional. Once a school was identified as a target school, the children within it were only required to be educationally disadvantaged in order to participate in the Title I program. It was not necessary that they be economically disadvantaged. So it was possible to have children in the program from advantaged homes. Seventeen percent of the mothers worked in unskilled or semi-skilled jobs. See Table 3.

The cumulative records of the children contained the educational level of the fathers. The mean education of the fathers

TABLE 3

PARENTAL OCCUPATIONS OF TITLE I STUDENTS

CATEGORY[b]	NO.	PERCENT
1. Business Education	0	0
2. Professional	5	11
3. Small Business[a]	4	9
4. White Collar	2	4
5. Skilled Manual	8	18
6. Semi-Skilled Unskilled	21	46
7. Others Unemployed 1 Disabled 1 Deceased 3	5	11

[a] All agricultural families.

[b] Caplow, Theodore, The Sociology of Work (New York; McGraw-Hill, 1954) p. 36. (categories based on)

in the sample was 8.1 years. The average figure for Montgomery County was 8.8 years. The mean educational level of the mothers was 9.9 years. Very often students aspire to go only as far as their parents did in school and when that point is reached, drop out. In other situations parents do not encourage children to go any further than they did. When parents put little importance upon an education, they give little incentive to their children to acquire one.

While there is space in the permanent records for religious preference, only one-third of the sample gave a preference. Since the number is not representative of the total group, no conclusions could be drawn from it.

CHAPTER IV

DESCRIPTION OF THE PROGRAM

Objectives

The general objective of the Title I reading program was: To reinforce and supplement the basic reading course for the educationally deprived children residing in the areas served by the target schools.

Specific objectives were:

Ability	1.	Improved performance as measured by standardized tests.
	2.	Improved children's verbal functioning.
	3.	Improved children's non-verbal functioning.
Attitudes	1.	Improved self-image.
	2.	Changed attitudes toward school.
Behavior	1.	Improved children's daily attendance.
	2.	Improved holding power of schools

Methods

Diagnostic Testing

Each child selected for the reading program was given a series of diagnostic tests. These included the Metropolitan Achievement tests given in September, and various other tests, selected by the individual reading teachers, such as the Lyons and Carnahan Diagnostic and the Dolch Lists and word tests in which the child is asked to read a passage of so many words from material on his level. Diagnosis is made on the basis of number and type of errors. From these tests and classroom performance, the reading teacher and the classroom teacher cooperatively mapped a program of instruction.

Individualized Program

After the child had participated in his regular basic reading program, the Title I reading teacher provided reading enrichment experiences. This was accomplished by assigning students with similar problems to small groups. The size of the groups varied from 1 to 8. If individual help was indicated, the reading teacher worked on a one to one basis. Thus, the child was exposed to twice the instruction in reading that he had previously received.

Use of Modern Textbooks and Equipment

New materials provided through Title I funds enabled the reading teachers to further individualize instruction. Materials included SRA Reading Labs, Ginn Reading Kits, various basic developmental reading series, and supplementary readers selected for specific vocabulary and interest levels. A more inclusive listing of these materials appears in the Reading Teachers' evaluation section.

Library

There were scheduled library periods in which Title I children were assisted in selecting books for enjoyment. Many new library books had previously been purchased with Title I funds. The books provided a wider range of easy reading material and covered many areas of interest. Although library reading lists had been kept the previous year on each child, they were not kept up during the year of this evaluation, 1968-69. The investigator talked to several of the school librarians who indicated there was a marked increase in circulation of library books and enthusiasm in reading since the addition of the new books made available by Title I.

Supportive Services of Title I

There were three supportive services within the reading program. One was the provision of the home-school coordinator, who attempted to keep the school informed about home situations, so that teachers were aware of problems affecting children's academic progress at school.

The second service was the placement of teacher aides in seven schools and two aides in special education classes to perform non-professional duties, leaving the teachers free for instructional activities.

The third service was the continued development of the curriculum resource center.

The Home-School Coordinator

The home-school coordinator, a former classroom teacher and special education teacher, has a master's degree in guidance and psychology. A registered social worker, she has had experience in high school guidance and in both community organizations and group work.

The primary concern of the home-school coordinator was to improve the holding power of the schools. Acting as liaison between the school and home, the coordinator was effective in supporting the instructional program.

In the 1968-69 school year the coordinator established a program of early identification of potential drop-outs. A form listing the early symptoms of drop-outs was distributed to every first grade teacher. See Table 4. The teachers were asked to list any of their students who exhibited these symptoms.

The response was as follows:

Personality Problems	90	
Conduct Problems	44	
Environmental Problems	83	
Poor School Adjustment	142	(117 of these were non-readers or poor readers)
Attendance Problems	39	(12 of these were health problems)

Of the 142 children identified with Poor School Adjustment, 117 were poor readers or non-readers. These children were referred to Helping Hand, a federally funded agency, which administered the Frostig Visual Perception Test. The theory behind the Frostig Program is that certain perceptual problems can prevent a child from learning to read. One hundred children were found to need training in one or more visual perception areas. Frostig work sheets were purchased from Title I funds, and individual training was begun with children who were deficient.

The coordinator visited the homes of children with excessive absences in an effort to uncover the cause. Whenever a significant health problem arose, the family was referred to the Health Department.

TABLE 4

FORM DISTRIBUTED TO FIRST GRADE TEACHERS FOR IDENTIFYING POTENTIAL DROP-OUTS

DO YOU HAVE A CHILD WITH ANY OF THESE SYMPTOMS?

Personality Problems	Conduct Problems	Environmental Problems	Poor School Adjustment	Attendance Problems
Poor attitudes	Runs away	Poor home conditions	Achievement not up to capacity	Habitual absenteeism
Belligerent	Steals	Won't eat	Unable to read	Truancy
Unhappy	Fights	Neglected	Straining to over-achieve	Chronically ill
Shy, timid		Quarrels with family	Marked indifference to school	Emotionally disturbed
Won't talk		Quarrels with peers	Non-acceptance by peers	Home conditions
Extreme temper tantrums		Burdensome home duties	Immature	
Unwilling to play games		One or both parents were drop-outs		
Anxiety		Siblings were drop-outs		
		No encouragement from home		
		Cannot afford the minimal expenditures		

Activities of the school-home coordinator for 1968-69 included:

Visitations to 250 homes

Location of 78 non-enrolled children

Contacting of 10 children who were home-bound

Contacting of 2 partially-sighted children

The classroom teachers who had children with personality and conduct problems received a copy of Mental Hygiene in the Classroom by Dr. Miner Wine Thomas. This monograph was distributed by the State Department of Mental Hygiene and gave information on probable causes of problems and suggested ways of alleviating each.

The coordinator also worked with 8th graders who had problems in adjusting to high school. It was her opinion that many of the problems of these older children could have been prevented or minimized if identified earlier. (Irene B. Kirchman, "An Ounce of Prevention is Worth a Pound of Cure," typed manuscript.)

The investigator accompanied the home-school coordinator on a day of home visitation, late in August. The purpose of these visits was to see if children were ready to go back to school. At each home she was welcomed as a person who could provide assistance. She checked to see if the children had clothes to begin school. Where families needed clothing she informed them where and at what hours the clothing bank was open. She checked to see if old health problems had been solved and if she could help in any other way.

In one home the children appeared to be overweight--a phenomenon rather typical of a low income diet. On the table, the peanut butter and jelly remained open from breakfast while flies came and went through open but unscreened windows. The next home could not be reached by automobile. We picked our way down a ravine, crossed a creek by hopping rocks, and pulled up the other side by holding onto the bushes. The home was orderly and neat, but the children lacked clothes to start school. The coordinator talked with the boy, who had had an attendance problem the previous year, in a firm yet friendly manner which conveyed the idea that the school was aware of his problems and trying to help.

A visit was made to the home of a high school boy who had emotional and behavioral problems. His mother had been ill and away from the home the previous year. The boy had enough confidence in the coordinator to call her at her home to talk over some of his problems.

Teacher Aides

Teacher aides were provided for seven of the schools and the two special education classrooms, making the total number of aides nine. All met requirements set up by the Federal guidelines. Eight of them had High School Diplomas and 1 had the equivalent of a High School certificate. Two had completed one year of college and one aide had three years of college. At the beginning of the year they received a week of in-service training.

The aides performed a wide range of duties at the individual schools. Some of them assisted the reading teacher in non-professional work with the Title I children. They did not take over teaching duties but assisted by reading to children or listening as children read or reviewed activities. The aides prepared work materials for the reading teacher, duplicated activity sheets, and obtained books, supplies and equipment for the teacher's use. Some aides were assigned to the library to help children in selecting books. The primary duty of the aides was to assist the reading teacher. Time permitting they were available to do typing, recording, or material preparation for other classroom teachers.

The Curriculum Materials Center

The purpose of this center was to collect and house material and equipment for the reading teacher's use. It was originally planned that a coordinator be provided for the center but a qualified person was not found during the year 1968-69.

The center was 2 rooms that had been used for storage in the Montgomery County Schools Administrative Building. They were remodeled into an office, a conference room and a library for materials and equipment. Only the construction materials were funded from Title I moneys. The cost of labor was financed by the local school system.

Teacher Evaluation of Materials Made Available to Schools by Title I Funds

The curriculum materials provided through the Title I funds would not otherwise have been available. Items of equipment such as overhead projectors, tape recorders, and copy machines received heavy use by reading teachers. In fact, classroom teachers made extensive use of the copy machines. Other of the material was less useful; for example, record players were available but records were not. The listening station received only limited use because some teachers found it to have technical difficulties beyond their ability to repair.

The Ginn Word Enrichment Program, Lyons and Carnahan, and Listen and Learn through Phonics all proved popular teaching material; however, teachers displayed individual differences in the ones they liked or disliked. (See Table 5)

The MacMillan Reading Spectrum, Writing (Penmanship) Materials, Independent Word Perception Filmstrips, Sound and Sense in Spelling, Tachist-o-Filmstrips Labs, and Sounds of English usually were not used and there were about as many unfavorable responses about them as favorable ones.

It was apparent that most of the eighteen reading teachers in this survey made an effort to use these curriculum materials. They continued the use of those they found effective and discarded those which did not work well for them.

The list of materials used, the comments of the reading teachers about them, and an indication of their use appear in Table 5. Teachers worked at various grade levels and all materials were not appropriate for all grades. This will help expalin why few evaluative comments were made about some material.

Reading Teachers

The supervisor of the reading program holds her bachelor's degree in elementary education and has specialized in the teaching of reading in her graudate work. She has had twenty years of

TABLE 5

TEACHER EVALUATION OF MATERIALS MADE AVAILABLE TO SCHOOLS BY TITLE I FUNDS[a]

NAME OF MATERIAL	FAVORABLE	UNFAVORABLE	DID NOT USE - NO RESPONSE
Peabody Language Development Kit	4		14
Listen and Learn Through Phonics	8	4	6
TTC Reading Kit	4		14
Sounds of English	3	3	12
Guide to Language Skills	1	(no other comments)	
Tachist-O-Filmstrip Labs	3	2	13
Independent Word Perception Filmstrips	1	2	15
Controlled Reader Filmstrips	5	1	12
Ginn Word Enrichment Program	10	3	5
Lyons and Carnahan	7	3	8
Flannel Board Visual Aids	8	1	9
Educational Games	13		5
Nifty Chart Tablets	9		9
Sound and Sense in Spelling	3	3	12
Writing (Penmanship) Materials	2	1	15
Textbooks	13		5
Overhead Projector	17	1	
Record Players[b]	13		5
Tape Recorders	17		1
Listening Station[c]	9	3	6

TABLE 5 - CONTINUED

NAME OF MATERIAL	FAVORABLE	UNFAVORABLE	DID NOT USE - NO RESPONSE
Language Master	13		5
Filmstrip Projector	13		5
Filmstrip Previewers	6		12
Projection Screens	5	2	11
Stop Watches	7	1	10
Copy Machine	14		4
Portable Chalkboard	11	1	6
4-Drawer File	6		12
Primary Typewriter	13		5
Television			18
Mobile Bookshelves	8		10
SRA Reading Labs	10	1	7
MacMillan Reading Spectrum	3	5	10
Visual Phonic Original Reading Program Kit	No comments received on this kit.		

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[a] Analyzed from M. H. Haymaker, "Evaluation of Instructional Materials and Equipment in Schools," 1968-69, Montgomery County.

[b] Four teachers either had no records or had very few.

[c] Three teachers mentioned technical problems.

teaching experience in Montgomery County Schools. Her experience included teaching reading in regular classroom situations as well as teaching remedial reading.

The educational background of the 18 reading teachers varied. One teacher held a master's degree in special education. Sixteen held baccalaureate degrees. Six degrees were in elementary education. One may assume that each of these teachers had at least one methods course which included teaching of reading. Three teachers have had extra courses in reading methods. Two had degrees in Home Economics, each having had courses in child development, methods in reading and a remedial reading course on graduate level. Four had degrees in English. Two of the four had courses in reading methods and remedial reading. Two teachers held a B.S. in psychology, one of whom had an M.S. in Special Education. The other had courses in both reading and exceptional education. One had a degree in secondary education and had no reading courses. Two teachers had no degree but held special certification. Both of these had taken a course in teaching of reading. See Tables 6, 7, 8 and 9 for a summary of reading teachers' training.

TABLE 6

READING TEACHERS' EDUCATIONAL BACKGROUND

	NO DEGREE	BACHELOR'S DEGREE	MASTER'S DEGREE
	2		
Elementary Education		6	
English		4	
Home Economics		2	
Psychology		2	
Secondary Education		1	
Bio-chemistry		1	
Special Education			1[a]
	2	16	1

[a] This person also holds a bachelor's degree in psychology.

TABLE 7

READING TEACHERS' CLASSROOM EXPERIENCE

YEARS	NO. OF TEACHERS
0	5
1 - 3	9
5 and Over	4
	18

TABLE 8

CERTIFICATION OF READING TEACHERS

TYPE	NO. OF TEACHERS
Collegiate Professional	16
Other Certification	2
	18

TABLE 9

NUMBER OF SPECIAL COURSES TAKEN BY READING TEACHERS

	0	1	2	3 or more
No. of teachers having Reading Courses	3	8	6	1
No. of teachers having Exceptional Education Courses		1		1

CHAPTER V

EVALUATION OF PERFORMANCE OBJECTIVES AS MEASURED BY STANDARDIZED TESTS

Introduction

One of the major purposes of the remedial reading program of the Montgomery County School system was to preserve and improve the reading, other cognitive, and behavioral skills and abilities of the program participants. Selected standardized test scores were statistically compiled and analyzed in an effort to uncover the effects of the program on the students' cognitive skills. Several major investigations were undertaken. One series of investigations involved students for whom data were available at grade levels 2 through 9. From an analysis of material from the central office usable data were available for 588 students. Reading test scores from the Metropolitan Achievement Test were utilized in an effort to determine program effectiveness. A more complete explanation of the process will be given in a later section.

Another investigation was a comparative study of fourth grade students, some of whom were enrolled in the reading program with others of similar backgrounds who did not receive remedial reading instruction with Title I funds. The two groups of students were compared, using scores from the Science Research Associates Reading Achievement Series.

Limitations

It should be mentioned that the cognitive studies are limited because of the nature of post facto investigations. The evaluation agreement of the Montgomery County Title I reading program was entered after the program for the 1968-69 year had been completed. As such, it was impossible or difficult to impose rigorous experimental controls, use random sampling exclusively, or select appropriate criteria. In the cognitive evaluations the data and information utilized had been gathered during the previous year and controls could not be established prior to the investigation. Therefore the study is limited, but this was a condition over which the investigators had no control.

Comparison of Pre- and Posttest Average Percentile Ranks

One of the investigations to evaluate the efficiency of the Title I Reading Program involved the use of Metropolitan Reading Test subscores. All students in grades 2 through 9 enrolled in the program were administered the Metropolitan Achievement Test--Reading. One form of the test was given in the beginning of the academic year, Fall, 1968. Another form of the test was given late in the academic year, Spring, 1969. Subscores for all students were obtained on word knowledge and reading. A third subscore on word discrimination was obtained for second grade students. The scores were analyzed in several ways in an effort to determine the efficiency of the reading program.

The first way in which the scores were analyzed was by comparing the average percentile rank[a] attained by the students on the posttest with the average percentile rank of students on the pretest. If the average percentile rank increased during the period from the pretest to the posttest, the increase, if substantial, could represent evidence of effectiveness of the reading program. If the average percentile rank remained the same or decreased, evidence of program efficiency would be more difficult to infer.

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[a] A percentile rank indicates the percent of students in the norm group who scored above or below a given person. The 50th percentile is the average rank for the group.

Data were analyzed and prepared in tabular form. Tables 10 through 17 give data on the Metropolitan Achievement Test - Word Knowledge Section for grades 2 through 9. Tables 18 through 25 give data on the Metropolitan Achievement Test - Reading Section for grades 2 through 9. Table 26 gives data on the Metropolitan Achievement Test - Word Discrimination Section for grade 2. The tables give the number and percent of Title I students scoring in each quartile.[a] Refer to Table 10. Seventy-seven second grade students in the Title I program scored in the lowest quartile, Q1, on the Metropolitan Achievement Test - Word Knowledge pretest. This represented forty-seven percent of the second grade students in the Title I program. On the posttest 99 second grade students, 60%, scored in the lowest quartile. The average percentile rank in the Word Knowledge Test of the Metropolitan Achievement Test for second grade students at the time of the pretest was 31; the average percentile rank on the posttest was 25. In other words, students ranked six percentile points lower on the posttest than on the pretest. Tables 11 through 26 can be interpreted in a similar fashion as Table 10.

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[a] A quartile represents 25% of the students in the norm group. Q1 represents the lowest 25%.

Table 27 summarizes the information about average percentile ranks about Title I participants on the Metropolitan Achievement Subtests. In the table are listed the grades which showed an increase in the average percentile rank between pre- and posttesting. An examination of the table reveals that percentile increases were noted on 7 comparisons and percentile decreases were noted on 10 comparisons. From the evidence summarized on Table 27, it would be difficult to infer that the reading program had been effective. In fact, a decrease in average percentile rank was noted in more cases than an increase was noted.

A point of interest revealed in Table 27 and worthy of mention is that there seems to be some tendency for a decrease in average percentile ranks among the lower grade groups and a tendency for an increase among the higher grades. Reasoning as to the cause of this finding can only be conjecture. For some reason, however, students in the upper grades showed more gain than students in the lower grades.

Comparison of Percent of Students Below the National Average at Pretesting and Posttesting

Another method of analyzing pre- and posttest scores of the Metropolitan Achievement Test is to compute the percent of students who were below the national average on the posttest and compare that figure with the percent of students who were below the national average on the pretest. If a lower percentage of students were below average on the posttest than on the pretest, and if the difference was high, the finding might be taken as evidence of effectiveness of the Title I Reading Program. Refer to Table 10. Note that ninety-one percent of the second grade students in the reading program ranked below average on the pretest. On the posttest, ninety-two percent of the second grade students ranked below the national average. There was a slightly greater percent of second grade students below the national average after they had received remedial instruction in reading. Tables 10 through 26 can be interpreted in a similar fashion.

Table 28 summarizes the information about the percent of students in the Title I Program below the national average. In the table are shown the grades which showed an increase in the percent of students below the national average between the pre- and posttesting, the grades which showed a decrease, and the grades which showed no change. In the current comparison a decrease in the percent of students below the national average is viewed as favorable.

Of the 17 comparisons that were made, increases in the percent of students below the national average were found in eight comparisons, decreases were found in seven and no change was found to exist in two. From these findings, it would be difficult to infer that the remedial reading program was an effective method for raising the reading level of students enrolled in the program.

The data in Table 28 also suggested that the reading program may be more effective for students in the higher grades than in the lower. It should be mentioned that such findings would be expected to be similar to those reported in Table 27 since the same data were analyzed, the only difference being in the method of analysis.

Grade Equivalent Gain Compared to Months of Instruction

Grade norms are based on the average score earned by pupils in a series of grades. Grade equivalents are students' scores that represent norms. For example, if the average raw score earned by the norm group in the beginning of the month of September is 27, the grade equivalent of students in the group is said to be 5.0. (The 5 represents the fifth year and the 0 represents the zero month.) Other students, regardless of their actual grade placements (month and year) who earned a score of 27 have a grade equivalent of 5.0. If a student's actual grade placement is above his grade equivalent he is performing below average; if his actual grade placement is below his grade equivalent he is performing above average.

Grade equivalent scores can be used to evaluate the success of Title I Programs. In the evaluation of a Virginia Title I Program[a] an indication of the success of the Title I program, as determined by standardized tests, was made using grade equivalent scores. In the Virginia evaluation the methodology included a calculation of the total months of instruction between pretest and posttest. To this figure was compared the total number of months that students increased in grade equivalent between the pretest and posttest. For example, if five months had elapsed between the time of pretesting and posttesting, and if 100 students were involved in a Title I Program, it could be said that 500 months of instruction had occurred. If the 100 students had an average grade equivalent of 4.2 at the time of the pretest and an average grade equivalent of 4.7 at the time of the posttest, they would have gained an aggregate of 500 months in grade equivalent. The ratio of months' grade equivalent gain to months of instruction could be taken as an indication of program success.

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[a] Title I in Action, Evaluation Summary Data, Federal Programs Office, State Department of Education, Richmond, Virginia, 1968.

Grade equivalent scores for the Metropolitan Achievement Series Subtests were analyzed in an effort to determine the effectiveness of the Montgomery County Title I Reading Program in a fashion similar to that outlined in the previous paragraph. Summary data for this analysis are given in Tables 29, 30, 31 and 32. Table 29 illustrates the months of instruction that occurred between pre- and posttesting. Refer to Table 29. One hundred and sixty-five students in the second grade were pretested at time 2.23 and posttested at time 2.80. An average time of 5.7 months elapsed between pre- and posttesting. Multiplying the elapsed time in months by the number of second graders, 165, resulted in a total of 941 total months of instruction for second grade students.

Refer to Table 30. This table illustrates the grade equivalent gain, in months, between pre- and posttesting. Second grade students had an average grade equivalent of 1.78 on the pretest and 2.20 on the posttest for an average gain of 4.2 months. Multiplying the gain by the total number of students, 165, resulted in a total gain in grade equivalent of 693 months.

If the total months gain in grade equivalent, 693, is divided by the total months instruction for second graders, 941,[a] a percent of gain in reading equivalent to total months instruction can be obtained. In the current illustration, the second grade students gained 74% in grade equivalent months to total months of instruction. Percent gain for other grades and for all tests can be computed in a similar fashion.[b]

The data from column 7 in Tables 30, 31 and 32 indicate that in only a few instances is the percent gain in grade equivalent to total months over 100%. In a total of seventeen comparisons, fourteen are below 100%. The average gain for grades 2 through 9 on the Word Knowledge Test of the Metropolitan Achievement Test is 77%; the average gain for grades 2 through 9 on the Reading section of the Metropolitan Achievement Test is 69%. In other words, students in the Title I Reading Program were, on the average, not gaining in grade equivalence at as fast a rate as time was passing. In spite of the reading program they continued to lag.

Several things in Tables 30, 31 and 32 should be mentioned. The first is that the reading scores of all grades were below average. This was true for both the pre- and the posttest. If an argument is to be made for the need of a reading program, the data in these tables are strong evidence in favor of one.

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[a] From Table 29, Column 6.

[b] Another way of computing the percent gain is to divide the average grade equivalent gain in months (Table 30, Column 5) by the average time difference in months between pre- and posttest from Table 29, Column 5.

[c] See the analysis on Page 42 for further comparison of grade equivalent gain.

Another thing that should be mentioned is that students in the upper grades again showed the most gain. The average percent gain[a] for the upper four grades was higher than the average for the lower four grades for the grades and tests shown in Tables 30 and 32. Again such a finding was expected since the analysis utilized the Metropolitan Achievement Test scores only to evaluate students at all grade levels.

Grade Equivalent Gain Compared to Prior Reading Competency

There are those who would argue that the comparison of grade equivalent gain in months to instruction in months, above, is unfair. The logic of such an argument has merit because students who are retarded in reading may not be expected to proceed at a normal rate, even with remedial instruction. A fairer comparison might be one which compares a student's progress after remedial reading instruction with his progress prior to the instruction. That is, the level of reading, as a percent of normal grade equivalent, at the time of pretesting and posttesting, should be compared. If the reading level, in percent of normal, had increased substantially at the time of posttesting over the level at the time of pretesting, the increase might be taken as evidence of effectiveness of the reading program. If not, then the inference that the reading program was successful could not so readily be made.

Tables 33, 34 and 35 show the average reading level of Title I students at the time of pretesting and at the time of posttesting. The pretest percent values of the various grades were obtained by dividing the grade equivalent pretest values, Column 3, Tables 30, 31 or 32, by the average grade placement at the time of pretest, Column 3, Table 29. The posttest percent values for the various grades were obtained by dividing the grade equivalent posttest values, Column 4, Tables 30, 32 or 32, by the average grade placement at the time of the posttest, Column 4, Table 29. Evidence of success of the program might be inferred if the latter percent was substantially higher than the former percent.

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[a] Both weighted and unweighted.

Refer to Table 33. Second grade students at the time of the pretest were reading at a level 80% of normal. At the time of the posttest, 5.7 months later, during which time they had received reading instruction, they were reading at a level 79% of normal. Data presented in Tables 33, 34 and 35 can be interpreted in a similar fashion.

Table 36 summarizes the information in Tables 33, 34 and 35. The number of grades in which a decrease in reading, as shown at the time of posttesting, was twice that of the number of grades that showed an increase. Of the seventeen comparisons made, increases in reading level was noted for five grades, decreases were noted for ten grades and no change was noted for two grades.

As a general statement, after having been exposed to over five months of reading instruction, students in the Title I Program failed to maintain the rate of reading proficiency, as a percent of normal, they had upon entry into the program. It should be noted that the percent differences in all 17 comparisons were small and that tests for statistical significance between percentages were not conducted. A casual inspection of the table gives an indication of a tendency of more favorable findings in the upper grades.

TABLE 10

GRADE 2

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Word Knowledge

	Pretest			Posttest	
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	77	47	Q1	99	60
Q2	73	44	Q2	53	32
Q3	14	8	Q3	13	8
Q4	1	1	Q4	0	0

Average Percentile Rank 31

Percent of Students Below the National Average 91%

Average Percentile Rank 25

Percent of Students Below the National Average 92%

TABLE 11

GRADE 3

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Word Knowledge

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	38	43	Q1	68	76
Q2	43	48	Q2	16	18
Q3	8	9	Q3	5	6
Q4	0	0	Q4	0	0

Average Percentile Rank 32

Percent of Students Below the National Average 91%

Average Percentile Rank 23

Percent of Students Below the National Average 94%

TABLE 12

GRADE 4

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Word Knowledge

Pretest

Quartile	No. of Title I Students	% of Title I Students
Q1	56	67
Q2	25	30
Q3	2	2
Q4	1	1

Average Percentile Rank 21

Percent of Students Below the National Average 97%

Posttest

Quartile	No. of Title I Students	% of Title I Students
Q1	57	68
Q2	24	29
Q3	3	3
Q4	0	0

Average Percentile Rank 20

Percent of Students Below the National Average 97%

TABLE 13

GRADE 5

Comparison of Pre- and Posttest Percentile Rank Data Metropolitan Achievement Test For Word Knowledge

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	42	86	Q1	39	78
Q2	7	14	Q2	9	18
Q3	0	0	Q3	2	4
Q4	0	0	Q4	0	0

Average Percentile Rank 18

Percent of Students Below the National Average 100%

Average Percentile Rank 17

Percent of Students Below the National Average 96%

TABLE 14

GRADE 6

Comparison of Pre- and Posttest Percentile Rank Data Metropolitan Achievement Test For Word Knowledge

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	53	84	Q1	49	80
Q2	7	11	Q2	4	7
Q3	3	5	Q3	7	11
Q4	0	0	Q4	1	2

Average Percentile Rank 17

Percent of Students Below the National Average 95%

Average Percentile Rank 19

Percent of Students Below the National Average 87%

TABLE 15

GRADE 7

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Word Knowledge

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	19	100	Q1	17	90
Q2	0		Q2	1	5
Q3	0		Q3	0	0
Q4	0		Q4	1	5

Average Percentile Rank 13

Percent of Students Below the National Average 100%

Average Percentile Rank 17

Percent of Students Below the National Average 95%

TABLE 16

GRADE 8

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Word Knowledge

	Pretest			Posttest	
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	60	65	Q1	46	48
Q2	14	15	Q2	29	30
Q3	12	13	Q3	11	11
Q4	7	7	Q4	10	11

Average Percentile Rank 29

Percent of Students Below the National Average 80%

Average Percentile Rank 34

Percent of Students Below the National Average 78%

TABLE 17

GRADE 9

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Word Knowledge

Pretest

Quartile	No. of Title I Students	% of Title I Students
Q1	14	70
Q2	3	15
Q3	2	10
Q4	1	5

Average Percentile Rank 30

Percent of Students Below the National Average 85%

Posttest

Quartile	No. of Title I Students	% of Title I Students
Q1	7	35
Q2	8	40
Q3	4	20
Q4	1	5

Average Percentile Rank 36

Percent of Students Below the National Average 75%

TABLE 18

GRADE 2

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Reading

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	48	29	Q1	96	58
Q2	67	41	Q2	47	28
Q3	49	29	Q3	16	10
Q4	1	1	Q4	6	4

Average Percentile Rank 40

Percent of Students Below
the National Average 70%

Average Percentile Rank 26

Percent of Students Below
the National Average 86%

TABLE 19

GRADE 3

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Reading

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	30	34	Q1	53	59
Q2	52	58	Q2	30	34
Q3	6	7	Q3	6	7
Q4	1	1	Q4	0	0

Average Percentile Rank 33

Percent of Students Below the National Average 92%

Average Percentile Rank 28

Percent of Students Below the National Average 93%

TABLE 20

GRADE 4

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Reading

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	55	65	Q1	59	70
Q2	27	32	Q2	22	26
Q3	2	3	Q3	2	2
Q4	0	0	Q4	1	1

Pretest:

Average Percentile Rank 22

Percent of Students Below the National Average 97%

Posttest:

Average Percentile Rank 21

Percent of Students Below the National Average 96%

TABLE 21

GRADE 5

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Reading

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	37	74	Q1	39	78
Q2	12	24	Q2	11	22
Q3	1	2	Q3	0	0
Q4	0	0	Q4	0	0

Average Percentile Rank 20

Percent of Students Below the National Average 98%

Average Percentile Rank 19

Percent of Students Below the National Average 100%

TABLE 22

GRADE 6

Comparison of Pre- and Posttest Percentile Rank Data Metropolitan Achievement Test For Reading

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	53	84	Q1	53	84
Q2	8	13	Q2	9	14
Q3	2	3	Q3	0	0
Q4	0	0	Q4	1	2

Average Percentile Rank 16

Percent of Students Below the National Average 97%

Average Percentile Rank 17

Percent of Students Below the National Average 98%

TABLE 23

GRADE 7

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Reading

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	19	100	Q1	19	100
Q2	0	0	Q2	0	0
Q3	0	0	Q3	0	0
Q4	0	0	Q4	0	0
Average Percentile Rank	10		Average Percentile Rank	7	
Percent of Students Below the National Average	100%		Percent of Students Below the National Average	100%	

TABLE 24

GRADE 8

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Reading

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	61	67	Q1	54	57
Q2	13	14	Q2	24	26
Q3	9	10	Q3	7	7
Q4	8	9	Q4	9	10

Average Percentile Rank 28

Percent of Students Below the National Average 81%

Average Percentile Rank 29

Percent of Students Below the National Average 83%

TABLE 25

GRADE 9

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Reading

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	10	50	Q1	11	55
Q2	9	45	Q2	4	20
Q3	1	5	Q3	3	15
Q4	0	0	Q4	2	10

Average Percentile Rank 27

Percent of Students Below the National Average 95%

Average Percentile Rank 36

Percent of Students Below the National Average 75%

TABLE 26

GRADE 2

Comparison of Pre- and Posttest Percentile Rank Data
Metropolitan Achievement Test
For
Word Discrimination

Pretest			Posttest		
Quartile	No. of Title I Students	% of Title I Students	Quartile	No. of Title I Students	% of Title I Students
Q1	33	20	Q1	76	46
Q2	70	42	Q2	46	28
Q3	57	35	Q3	37	22
Q4	5	3	Q4	6	4

Average Percentile Rank 45

Percent of Students Below the National Average 62%

Average Percentile Rank 36

Percent of Students Below the National Average 74%

TABLE 27

Summary Table of Average Percentile Comparisons Between Pre- and Posttest Percentile Rank Data Metropolitan Achievement Test

	Word Knowledge Test	Word Discrimination Test	Reading Test	Total
Grades with an Increase in Average Percentile Ranks	6,7,8,9		6,8,9	7
Grades with a Decrease in Average Percentile Ranks	2,3,4,5	2	2,3,4 5,7	10

TABLE 28

Summary Table of Comparisons of Percent of Title I Reading Programs Students Below the National Average Metropolitan Achievement Test

	Word Knowledge Test	Word Discrimination Test	Reading Test	Total
Grades with an Increase in Percent of Students Below Average	2,3	2	2,3,5 6,8	8
Grades with a Decrease in Percent of Students Below Average	5,6,7,8,9		4,9	7
Grades with No Change in Percent of Students Below Average	4		7	2

TABLE 29

Summary of Time Elapsed in Months Between Pre- and Posttesting with Metropolitan Achievement Test

1	2	3	4	5	6
Grade	Number of Students	Avg. Grade Placement Pretest	Avg. Grade Placement Posttest	Avg. Time Difference (in months) between Pre- and Posttests (4 - 3)	Total Months Difference (2 x 5)
		yr. mo.	yr. mo.		
2	165	2.23	2.80	5.7	941
3	89	3.23	3.81	5.8	516
4	84	4.24	4.80	5.6	470
5	50	5.24	5.80	5.6	280
6	63	6.19	6.80	6.1	384
7	19	7.16	7.80	6.4	122
8	96	8.25	8.80	5.5	528
9	20	9.20	9.80	6.0	120
					3,361

TABLE 30

Summary of Grade Equivalent Gain in Months Between Pre- and Posttesting with Metropolitan Achievement Test for Word Knowledge

1 Grade	2 Number of Students	3 Grd. Eq. Pretest	4 Grd. Eq. Posttest	5 Grd. Eq. Gain in Months (4 - 3)	6 Total Months Gain (2 x 5)	7 Percent Gain To Total Months Instruction
2	165	1.78	2.20	4.2	693	74
3	89	2.61	2.80	1.9	169	33
4	84	2.93	3.35	4.2	353	75
5	50	3.56	3.85	2.9	145	52
6	63	4.12	4.70	5.8	365	95
7	19	4.54	4.80	2.6	49	40
8	96	6.22	6.86	6.4	614	116
9	20	6.76	7.80	10.4	208	173
2 through 9					2,596	77

TABLE 31

Summary of Grade Equivalent Gain in Months Between Pre- and Posttesting with Metropolitan Achievement Test for Word Discrimination

1	2	3	4	5	6	7
Grade	Number of Students	Grd. Eq. Pretest	Grd. Eq. Posttest	Grd. Eq. Gain in Months (4 - 3)	Total Months Gain (2 x 5)	Percent Gain To Total Months Instruction
2	165	2.02	2.49	4.7	776	82

TABLE 32

Summary of Grade Equivalent Gain in Months Between Pre- and Posttesting with Metropolitan Achievement Test for Reading

1	2	3	4	5	6	7
Grade	Number of Students	Grd. Eq. Pretest	Grd. Eq. Posttest	Grd. Eq. Gain in Months (4 - 3)	Total Months Gain (2 x 5)	Percent Gain To Total Months Instruction
2	165	1.86	2.26	4.0	660	70
3	89	2.64	2.96	3.2	285	55
4	84	2.99	3.35	3.6	302	64
5	50	3.69	3.97	2.8	140	50
6	63	4.11	4.51	4.0	251	66
7	19	4.01	4.21	2.0	38	31
8	96	5.90	6.37	4.7	451	85
9	20	6.56	7.47	9.1	182	152
2 through 9					2,310	69

TABLE 33

Summary Table of Average Reading Level of Title I Reading Students at the Time of Pretesting and at the Time of Posttesting with the Metropolitan Achievement Test for Word Knowledge

Grade	Pretest Level in Percent of Norm Group	Posttest Level in Percent of Norm Group
2	80	79
3	81	73
4	69	70
5	68	66
6	67	69
7	63	62
8	75	78
9	73	80

TABLE 34

Summary Table of Average Reading Level of Title I Reading Students at the Time of Pretesting and at the Time of Posttesting with the Metropolitan Achievement Test for Word Discrimination

Grade	Pretest Level in Percent of Norm Group	Posttest Level in Percent of Norm Group
2	91	89

TABLE 35

Summary Table of Average Reading Level of Title I Reading Students at the Time of Pretesting and at the Time of Posttesting with the Metropolitan Achievement Test for Reading

Grade	Pretest Level in Percent of Norm Group	Posttest Level in Percent of Norm Group
2	83	81
3	82	78
4	71	70
5	70	68
6	66	66
7	56	54
8	72	72
9	71	76

TABLE 36

Summary Table of Comparisons of Achievement Level of Title I Students at Time of Pretesting and at Time of Posttesting

	Word Knowledge Test	Word Discrimination Test	Reading Test	TOTAL
Grades with an Increase in Level of Achievement	4,6,8,9		9	5
Grades With a Decrease in Level of Achievement	2,3,5,7	2	2,3,4,5,7	10
Grades with No Change in Achievement			6,8	2

Comparative Study of Fourth Grade Students

One of the studies undertaken to investigate the effectiveness of the reading program was a comparative study. Fourth Grade students, some of whom had received remedial reading instruction, were compared with other 4th grade students who had not.

There were 84 fourth grade students from nine schools who received reading instruction with funds provided by the Title I program. A random sample of 32 students[a] was obtained from this population. Among the data noted for these children were sex, first grade Metropolitan Reading Scores, fourth grade I.Q. Scores, and three Science Research Associates reading scores (i.e. Reading Vocabulary, Reading Comprehension and Total Reading).[b] This group of thirty-two students was designated as the experimental group.

In Montgomery County there were three schools which did not qualify for participation in the Title I program. Students in the schools did not receive remedial reading instruction. Thirty-two students were obtained from the three non-participating schools. Students from these schools, designated as controls, were not selected randomly since it was desirable to match them with members of the experimental group. Students in both groups were of the same sex and had similar Metropolitan Reading Readiness and fourth grade I.Q. scores. See Table 37 for a description of members of both groups.

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[a] Complete data were not available on 32 pairs of students for all three comparisons. See Table 38 for the number of students included in each comparison.

[b] Lorge-Thorndike Intelligence Test
SRA Achievement Series Test - Form C - Blue Level

TABLE 37

Description of 4th Grade Students in Experimental and Control Groups in the Comparative Study Using SRA Reading Scores

Experimental Group			Control Group[a]		
Sex:	Male	19	Sex:	Male	19
	Female	13		Female	13
Metropolitan Reading Scores	A	0	Metropolitan Reading Scores	A	0
	B	5		B	5
	C	10		C	10
	D	14		D	14
	E	3		E	3
N = 32			N = 32		

[a] All 4th grade students from the 3 schools in the control group with reading scores C, D, E were included in the study.

The two groups were compared on three variables. Scores on reading comprehension, vocabulary, and total reading subtests of the Science Research Associates Achievement Series--Reading, were used as the basis of comparison.[a]

Mean scores for the experimental and control groups were compared. Statistical tests were conducted using the t-test, pooled formula. In none of the three comparisons were significant differences found to exist. From these findings it is concluded that there was no reason to believe that members of the experimental group differ from those of the control group. In other words, the findings did not indicate that remedial reading instruction was a more effective method for changing the reading skills of fourth grade students than instruction given to the control group. Refer to Table 38 for a complete analysis of the findings.

Achievement of First Grade Students

Reading abilities of first grade students at the beginning of the year and at the time of posttesting in Spring, 1969, are reported in this section. Since some tests different from those given to students in grades 2 through 9 were used for first grade students, the analysis of reading achievement of first grade students is somewhat different from that used with students in higher grades.

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[a] The SRA Interpretive Guide states the tests used stories that represent typical reading situations. The reading selections in the tests are designed to measure ability to understand the theme of the reading selection, identify the main idea in paragraphs, make logical inferences, retain details, and understand the meaning of words in context and other reading skills.

TABLE 38

Analysis of Findings on Three Comparisons
Using SRA Reading Scores

	Reading Comprehension		Vocabulary		Total Reading	
	Experimental Group	Control Group	Experimental Group	Control Group	Experimental Group	Control Group
Mean Score	11.97	12.50	9.59	11.13	22.10	23.68
Variance	16.03	22.74	18.86	10.95	55.42	40.56
F-Ratio	1.42		1.72		1.37	
t	.46		1.60		.90	
Number of Students	30	30	32	32	31	31

Reading scores of students, as measured by the Metropolitan Readiness Test, suggest that first grade students enrolled in the Title I program were in need of special help in reading. A reference to Table 39 will verify this contention. Eighty-two percent of the 167 students in the program were reading at the D and E readiness levels. The D and E levels of the test are, according to the Metropolitan Readiness Test Manual, indicative of students who are likely to have difficulty in first grade work and extraordinary reading instructional conditions should be used with them. Such students are classified "below average" on the Metropolitan Readiness Test.

In the spring of 1969, first grade students were given the Metropolitan Achievement Test similar to those administered students in other grades. However, since they were not pretested in the fall of 1968, comparative analyses similar to those made for grades 2 through 9 were not possible. In spite of a lack of comparability, it was thought desirable to analyze first grade results and make inferences where possible.

Tables 40, 41 and 42 give posttest results for first grade students on three subtests of the Metropolitan Achievement Test, i.e., Word Knowledge, Word Discrimination, and Reading. The average percentile rank and percent of students below average indicate that first grade students remain below average at the end of the term of remedial reading instruction in the first grade. The findings, as indicated by the two criteria of percentile rank and percent of students below average, are similar to those reported for other grades. Refer to Tables 10 through 26.

TABLE 39

METROPOLITAN READINESS TEST

Reading Grades for 1st Grade Students

Grade	**Number**	**Percent**
A	2	1
B	6	4
C	21	13
D	81	48
E	57	34

TABLE 40

GRADE 1

Posttest Percentile Rank Data
Metropolitan Achievement Test for Word Knowledge

Quartile	No. of Title I Students	% of Title I Students
Q1	91	55
Q2	45	27
Q3	19	11
Q4	12	7

Average Percentile Rank 30

Percent of Students Below the National Average 82%

TABLE 41

GRADE 1

Posttest Percentile Rank Data Metropolitan Achievement Test for Word Discrimination

Quartile	No. of Title I Students	% of Title I Students
Q1	90	54
Q2	43	26
Q3	26	15
Q4	8	5

Average Percentile Rank 30

Percent of Students Below the National Average 80%

TABLE 42

GRADE 1

Posttest Percentile Rank Data Metropolitan Achievement Test for Reading

Quartile	No. of Title I Students	% of Title I Students
Q1	80	48
Q2	53	32
Q3	28	17
Q4	6	3

Average Percentile Rank 32

Percent of Students Below the National Average 80%

Another Analysis of Metropolitan Achievement subtest scores yielded contradictory findings. When grade equivalent scores of students in the Title I program were compared to actual grade placement in years and months, first grade students were performing near normal (refer to Tables 43, 44 and 45). Such results would have to be viewed as evidence of program success for first grade students, especially since the reading readiness of so large a percent of the first grade students was subnormal (Table 39). It should be mentioned that the evaluators are suspicious of the first grade Metropolitan Achievement score data, because it is believed that the percentile and grade equivalent scores at this level were estimated. Readers are cautioned about making decisions on data which is suspect.

TABLE 43

Grade Equivalent Data for First Grade Students at Time of Posttesting Metropolitan Achievement Test for Word Knowledge

1 Grade	2 Number of Students	3 Average Grd. Eq. Posttest	4 Actual Grade Placement Posttest	5 Posttest Level in % of Norm Group
1	167	1.68	1.8	93%

TABLE 44

Grade Equivalent Data for First Grade Students at Time of Posttesting Metropolitan Achievement Test for Word Discrimination

1 Grade	2 Number of Students	3 Average Grd. Eq. Posttest	4 Actual Grade Placement Posttest	5 Posttest Level in % of Norm Group
1	167	1.73	1.8	96%

TABLE 45

Grade Equivalent Data for First Grade Students at Time of Posttesting Metropolitan Achievement Test for Reading

1 Grade	2 Number of Students	3 Average Grd. Eq. Posttest	4 Actual Grade Placement Posttest	5 Posttest Level in % of Norm Group
1	167	1.70	1.8	94%

CHAPTER VI

BUDGET

The budget for the 1968-69 school year provided $163,697.94. This amount was divided into the following major classifications:

	Amount	Percentage
Administration	4,846.86	3.0
Instruction	143,691.77	87.8
FICA & Workmen's Compensation	13,722.81	8.3
Capital Outlay	1,436.50	.9
	$ 163,697.94	100%

The previous year (1967-68) $211,948.48 was appropriated to the Title I program in Montgomery County. Thus the expenditures for this year, $163,697.94, were reduced by 22%.

At first the County planned to use 21 teachers and 8 aides, all at three-quarter time, in the Title I reading program. An addition through supplementary funds allowed the County to reduce slightly the number of teachers used but to use them on a full-time basis. As may be seen, the instructional costs plus F.I.C.A. and workmen's compensation comprise 96.1% or $157,414.58 of the budget. The administration costs have been kept low. In fact, they account for only 3.0% of the total expenditures.

The capital outlay funds allowed the purchase of two tape recorders, a four-drawer file, and the remodeling of offices and a materials room used in the program.

There appears evidence that the Title I funds are in fact being devoted to a reading improvement project. From other sections of the report it can be seen that many materials have been purchased in previous years and that they are being utilized extensively. One recommendation would be to urge the personnel involved with this project to report breakdown of equipment, and efforts should be made to effect repair as soon as possible.

On the next page appears the budget, as of May 30, 1969, for the 1968-69 fiscal year.

TITLE I

State Project #1C　　　Date: May 30, 1969

Budget Items	Present Budget	Amount Requested to be Added	Amount Requested to be Deducted	Budget Requested
CODE 100-ADMINISTRATIVE				
1. Secretary-Bookkeeper	3,825.00			3,825.00
2. Part-time help	333.00		17.90	315.10
3. Travel for Office Staff	50.00			50.00
4. Other	700.00		43.24	656.76
TOTAL CODE 100	4,908.00		61.14	4,846.86
CODE 200-INSTRUCTION				
1. Teachers	99,000.00		718.99	98,281.01
2. Supervisor	7,214.94			7,214.94
3. School-Home Coordinator	8,100.00			8,100.00
4. Materials Coordinator Clerk	-0-	280.00		280.00
5. Teacher Aides	23,400.00			23,400.00
6. Other:				
a. Travel	400.00			400.00
b. Expendable Supplies	5,850.00	30.82		5,880.82
c. Evaluation	60.00	75.00		135.00
TOTAL CODE 200	144,024.94	385.82	718.99	143,691.77
CODE 800-FIXED CHARGES				
1. F.I.C.A., Ret., Ins., Workmen Compensation	13,500.00	222.81		13,722.81
TOTAL CODE 800	13,500.00	222.81		13,722.81

(Continued)

Budget Items	Present Budget	Amount Requested to be Added	Amount Requested to be Deducted	Budget Requested
CODE 1200-CAPITAL OUTLAY				
1. Remodeling Resource Center	1,200.00			1,200.00
2. File-4-drawer	65.00		2.50	62.50
3. Tape Recorders (2)	-0-	174.00		174.00
TOTAL CODE 1200	1,265.00	174.00	2.50	1,436.50
GRAND TOTAL	163,697.94	782.63	782.63	163,697.94

CHAPTER VII

ATTENDANCE

According to the observations made by the reading and classroom teachers there was marked improvement in attitude and behavior among students. There was no improvement, however, in attendance.

In the year previous to this study, 1967-68, 36 children in the group of the 45 sample were absent 365 days, an average of 10 days per student. (Nine first graders were eliminated for the attendance analysis since they did not attend school the previous year). In 1968-69 the days absent climbed to 419, an average of 12 days per student, and an increase of 54 days. Most of this increase was accounted for by one child who missed only 1 day in 1967-68 but was absent 43 days in 1968-69. His mother and father separated and the mother took the child out of town for most of this period.

Absenteeism was high among the Title I participants. The primary cause seemed to be sickness. Another cause was disinterested parents. The school did provide dental and visual check-ups. It also provided free lunches to those who could not pay. At one time, vitamins and worm medicine were distributed to these children, but when funds were decreased, this service was discontinued. There is not too much a school system can do to improve the diet these children receive at home, but perhaps resuming the distribution of the vitamins and worm medicine might help.

The comparative study of 32 fourth graders in the Title I program and 32 fourth graders outside the program revealed a much higher number of days absent among students in the Title I group. In the experimental group (Title I) there were 302 absences, or an average of 9 days per pupil, as compared to 187 absences, or an average of 6 days per pupil in the control group. The three children who missed the highest number of days in the experimental group missed 68, 41, and 31 days, respectively. The highest number of days any child in the control group missed was 24. The difference might be due to the fact that family incomes were lower in the target schools, hence less emphasis is put on health care. The family background could also indicate less interest in education. Whatever the cause for poor attendance, it might have had an impact upon scholastic achievement.

CHAPTER VIII

EVALUATION OF ACHIEVEMENT, ATTITUDES AND BEHAVIOR

The following evaluations were made by reading teachers and classroom teachers in reports and comments recorded in cumulative record data. Additional information was obtained by personal interviews with these teachers. The evaluations are based on the 45 children chosen throughout the target schools by random sample. On 12 children's records the reading teacher had recorded test scores but made no comment on progress. In most of these cases the classroom teachers were able to supply the needed information.

The teachers evaluated student progress in terms of their experience. According to the teachers, 55% of the children had made "significant" progress in reading skills, 34% had made "some" progress and 11% were stated to have made no progress. The children whom teachers had identified as easily distracted or withdrawn apparently responded to the individual or small group instruction. Teachers stated that withdrawn children gained new confidence and their ability to communicate orally was greatly improved.

Almost half of the children, 47%, improved "significantly" in attitudes. Teachers related cases where a little success acquired in individual or small group teaching improved children's self-concepts to the extent that they begged for homework or special assignments. Others volunteered for parts in plays.

One reading teacher told how she was able to find a child's special interest in rocket ships and planned some of his reading activities around this interest. Those children showing "some" improvement in attitudes comprised 27% of the group and only 5% of the children made no improvement. Teachers described 20% of the participants as interested and eager with no problems.

The teachers stated that 50% in the sample of 45 children had no problems in the area of behavior, 18% improved "significantly", 18% improved "some" and 14% showed no improvement. These children were said to have begun to relate better to their peers, to accept authority, and to cooperate in classroom activities.

TABLE 46

Teacher Evaluation of Progress in Achievement, Attitude and Behavior

	Number	Percent	
Improved in Reading Skills			
Significantly	24	55	
Some	15	34	There was no teacher evaluation available on 1 student.
None	5	11	
Total	44	100%	
Improved in Attitudes			
Significantly	20	47	
Some	12	28	
None	4	5	No evaluation on 1 student.
No Problem in this Area	8	20	
Total	44	100%	
Better Behavior in General			
Significantly	8	18	
Some	8	18	
None	6	14	No evaluation on 1 student.
No Problem in this Area	22	50	
Total	44	100%	

This information taken from cumulative folders and Title I folders of sample of 45 students. On 8 students, the reading teacher had made no comment on progress, and only test scores were recorded. On 3 students no comments were made by the classroom teacher.

CHAPTER IX

SUMMARY

Need

Test results showed evidence that some type of remedial program was necessary in Montgomery County. The staff proceeded to formulate a program which met the guidelines, and also one that was personalized to accommodate the needs of the Montgomery County System.

The families of the children, in large majority, were in unskilled and semi-skilled occupations. The fathers' average educational level was 8.1 years, and below that of the Montgomery County mean of 8.8 years. These children, therefore, were in large measure from educationally and economically deprived homes.

Since the mean I.Q. of this group was found to be 83.5, it was not too surprising that they were reading a year or more below their normal grade placement. Obviously these children cannot be expected to compare favorably with children of higher mental ability in achievement. Possibly special educational techniques will have to be adopted for these children instead of just "reinforcing" the same methods used with average middle class students.

Objectives: The general objective of the Montgomery County reading program was:

> To reinforce and supplement the basic reading course for the educationally deprived children residing in the areas served by the target schools.

Specific objectives were:

1. Improved student performance as measured by standardized tests.
2. Improved student verbal functioning.
3. Improved student non-verbal functioning.
4. Improved student self-image.
5. Improved student attitudes toward school.
6. Improved student daily attendance.
7. Improved holding power of schools.

Performance as Measured by Standardized Tests. One of the purposes of the reading program was the improvement of participants' reading skills, as measured by standardized tests. Available standardized test data were gathered and analyzed to help evaluate the efficiency of the program. Major tests included the Metropolitan Achievement Test for Reading (MAT). Student scores on three subtests of the MAT were analyzed. Data from the Science Research Associates Achievement Test for Reading (SRA) were also used in a comparative study of fourth grade students who had received reading instruction with those who had not. Student scores on three subtests of the SRA Test were used to compare achievement.

MAT pre- and posttest score data were available for 588 students in grades 2 through 9. Subscores for all students were obtained on the word knowledge and reading subtests. A third subscore on word discrimination was obtained for second grade students. Four analyses of the MAT data involving different criteria were made. They were:

1. A comparison of pre- and posttest average percentile ranks
2. A comparison of the percent of students below the norm average at the time of pretesting and posttesting

3. A comparison of grade equivalent gain in months to the time of instruction in months
4. A comparison of grade equivalent gain to prior reading competency.

In the first comparison, summarized in Table 27, a decrease in average percentile rank was noted in more grades than an increase was noted. On the average student percentile norms were lower after exposure to the program. From this evidence it would be difficult to infer that the program had been effective. It should be noted that there was a tendency for the decrease to occur at the lower grade levels and increase at the higher grade levels. In other words, there is more evidence of program success at the upper grades.

In the second comparison of the percent of students reading below the norm group average, summarized in Table 28, the number of grades in which negative findings were reported exceeded the number of grades in which positive findings were reported. Again from this analysis of the MAT test data it would be difficult to infer program efficiency. Likewise, there is more evidence of program success in upper grades than in lower ones.

The third investigation using MAT data involved grade equivalent gain. The total grade equivalent gain, in months, was compared to total months of instruction received by Title I participants. Summary data for this facet of the evaluation are found in Tables 30, 31 and 32. On the average, students gained about 3/4 in grade equivalent months compared to the months of instruction they received. In other words, they continued to fall further behind in reading skills, in spite of the instruction they received in the reading program. As in the two prior analyses, more favorable findings were uncovered in the upper grades.

The fourth analysis of MAT data for grades 2 through 9 also involved grade equivalent scores. In this analysis student gain during the program was compared to reading achievement level prior to entry. Again the findings were negative, as summarized in Table 36. Twice as many grades were reading at a lower achievement level after program exposure than were reading at a higher level. Ten grades had a decrease in achievement level, five grades an increase. Again more favorable results were found at the upper grades.

Summarizing for the analyses of MAT scores, it can generally be said that little evidence of program success is apparent. Some exception was noted for the upper grades, where more favorable findings were reported. As a caution, the reader is warned that the analyses are post facto in nature and involved only MAT test scores. It should be expected that findings would be similar for all four investigations since only MAT test scores were used.

A second major investigation of program efficiency involved fourth grade students. One group of fourth grade students who had received remedial reading instruction was compared with a similar group that had not. Statistical tests were conducted and significant differences were not found to exist. Summary data of the findings of the study of these subtest scores of the SRA are given in Table 38. Within the limitations of the study it could not be inferred that reading instruction resulted in better achievement among students enrolled in the Title I reading program than among similar students who were not enrolled.

An analysis of test scores of first grade students was also made. Since comparable pre- and posttests were not administered to first grade students, comparisons similar to the ones made for grades 2 through 9 were not possible. Metropolitan Readiness Test results for first grade students strongly support the implementation of some sort of reading program for students. See Table 39.

An analysis of post program MAT test results of first grade students produced findings similar to those of the evaluation for grades 2 through 9. That is, students averaged below the norms in average percentile rank and a high percent of first grade students were below the national average, Tables 40, 41 and 42. One analysis of grade equivalent data, Tables 43, 44 and 45, gave evidence of program success for first grade students. But, in view of the contrary nature of the findings, the reader is cautioned about arriving at conclusions of program efficiency.

Verbal Functioning. From records and personal interviews, the most significant progress made by the Title I children was the improvement in their ability and willingness to communicate orally. As shown in the description of these children, many were shy and withdrawn in the regular classroom. When placed in small working groups with a reading teacher who had time to work with children individually, many came out of their shells. Some teachers expressed their belief that, with the progress made this year in gaining the confidence of the children and getting them to express themselves more freely, improvement in reading skills must follow.

Non-verbal Functioning. This objective is discussed below in attitudes and behavior changes.

Improved Self-image and Attitudes Toward School. Marked progress was made in these areas according to both classroom and reading teachers. Forty-seven percent of the sample of 45 had made significant improvement. (Small successes went a long way in building self confidence and improving attitudes toward school work).

Attendance. The children in the sample study had poorer attendance this year than the previous one. The Title I children in the fourth grade comparison study also had more absences than the fourth graders outside the program. This seems to be one of the problem areas. Although the school-home coordinator made home visits in cases of excessive absences, there were health problems and cases of disinterested parents which could not be overcome. Instead of decreasing the funds for this program, it would seem more reasonable to increase funds in order that more health services might be provided for these children.

Holding Power of Schools. In the year 1966-67 the Montgomery County drop-out rate for grades 8 through 12 was 6.7%. It was decreased slightly the following year, 1967-68, to 6.3%. This figure was higher than the statewide drop-out rate which was 5.1%. In the year 1968-69 the county drop-out rate was lowered to 4.3% and was below the statewide rate which was 4.5%. Although some of the decrease was due to raising the compulsory education age from sixteen to seventeen, this was a statewide factor and the Montgomery County rate was still below the state rate. Other factors contributing to this decrease in drop-outs in 1968-69 could well have been the effort that Montgomery County made through the reading program and the home-school coordinator made to keep students interested in school.

It is a well known fact that students who are reading two years below their grade level are the most probable candidates for dropping out as soon as they reach an age beyond the compulsory ruling. Although the test scores do not show a significant improvement in reading itself, one cannot overlook the indirect impact that such a program might have. There may have been enough change in attitude, due to the special attention these children received, to be a holding factor.

The home-school coordinator probably contributed a great deal toward encouraging students to stay in school. Her knowledge of attendance problems, her aid in solving personal problems, and her influence with parents could have made it possible to increase the interest of both parents and children in staying in school. See Table 47.

Budget. The budget of the Title I program was $163,697.94, down 22% from the preceding year. The instructional costs plus fringe benefits comprised 96.1% of the budget. All indications point to the wise use of Title I funds, and the system is to be commended on using such a large percentage in instructional areas.

TABLE 47

Drop-outs from Grades 8 through 12

	Montgomery County			
Year	Enrollment	No. Drop-outs	Percent	State Percent
1966-67	2,667	179	6.7	4.7
1967-68	2,692	170	6.3	5.1
1968-69	2,860	122	4.3	4.5

Instruction. The eighteen reading teachers vary widely in preparation, from two without degrees to one with a master's degree. Five of the teachers used were beginning teachers and four had five or more years of experience. The supervisor of the program has had extensive experience as a teacher and has specialized in reading in her graduate work.

It is on teacher preparation in reading that the most careful review might be made. While those making this evaluation found no lack of enthusiasm among the teachers used, it must be pointed out that the inexperience of many of the teachers plus the fact that three had no reading courses and another eight only one, indicate a specific area for improvement. There is need to raise the educational competence of the reading teachers. In order to effectuate this upgrading, it is recommended that grants or stipends be offered to give teachers incentives to improve their professional competence.

Title I funds, especially in earlier years, have been used to obtain extensive teaching materials and equipment. The teachers, for the most part, made use of these materials. It is recommended that every effort be made to keep these materials current and in good repair. A curriculum materials center is now available, and, now that a coordinator has been found to supervise it, the care and use of materials and equipment should be improved.

There were nine teacher aides used. Comments on their usefulness, both to reading teachers and to other teachers, were extremely favorable. It is suggested that they continue to be used.

The home-school coordinator showed interest in the children and had good rapport with them and their parents. She is considered an asset of the program. The supervisor of the Title I project is well trained, has good experience, and represents another strong factor.

It was found that the turnover rate of reading teachers was very high. Only one reading teacher who was on the staff at the initiation of the program in 1966 remained on the staff in the 1968-69 year. At the end of the 1968-69 year, 13 of the 18 teachers left the program. Those who remained were ones who had expressed genuine interest in the program and had taken extra reading courses to help them in their work. Some of the reading teachers were placed in classroom teaching positions in which their experience and talent would be available to a greater number of children. Three teachers went on maternity leave, one left to go back to school, and several teachers moved from the county when their husbands graduated from the local university. Teacher instability is believed to be detrimental to the program. It is recommended that care be taken in hiring teachers for the reading program who would be likely to stay in the locality. Also, teachers who have had some classroom experience with children would be preferred over those with no experience.

Parental Involvement in the Title I Program. Three meetings were planned for Title I parents during the year. The first was to explain the program, the second one, planned for mid-year, was to report progress and start an evaluation procedure, and the third meeting was to allow parents to evaluate and make recommendations.

Later, the administrative staff decided that calling a separate meeting of Title I parents might identify their children as "different" and perhaps reinforce negative feelings already present. The opinion was that the Title I program should become a part of the total school program.

Therefore, no special meetings were held but the Title I program was explained by each principal at some "scheduled gathering" at his or her school. Many reading teachers scheduled individual conferences with parents of the Title I children. A great many of the parents were interested and cooperative, but for the sample of 45 children, 18% would not come to the school for conferences.

An Advisors' Committee was organized and had its initial meeting during the year 1968-69. This group consisted of:

7 Parents
1 Reading Teacher
1 Classroom Teacher
1 Principal
1 Member of the School Board
1 Member of the Board of Supervisors
Director of the Community Action Agency
1 Aide from Community Action

This committee was formed to receive reports on progress of the Title I program, and to obtain a feedback of members' opinions. The first meeting was attended by 3 parents of the 7 listed on the committee. At that time the program received a favorable reaction. The second Advisory Committee meeting was early in the year, 1969-70, at which time the supervisor explained the Frostig Program. One parent was present at this meeting and commended the program highly. It would appear that there is a lack of interest by parents in the program. Effort should be made to increase their participation and involvement.

In many Title I programs, parents are used as aides in the schools, thereby creating an extra bond between home and school. The Montgomery County aides are so well qualified and are doing such effective jobs one would be reluctant to replace them with probably less qualified personnel. However, some provision should be made to associate more parents with this program.

A system is to be commended when techniques and methods initiated and proven worthy in a Title I program are adopted and expanded with funds from the local system. One of the purposes of federal assistance was to allow new programs to be initiated. The Title I reading program was cut in the 1969-70 year to the first three grades only. However, small group remedial classes were continued in the high school with the same reading teacher. According to testing, sufficient progress was made in the 8th and 9th grades to justify continuation of the project and it has become an integral part of the regular high school program.

The Frostig Program for first graders which was started late in the 1968-69 year by the Title I staff was expanded to include the second grade and is now entirely sponsored by the local system and Helping Hand.

CHAPTER X

RECOMMENDATIONS

The evaluators are cognizant of the difficulties that have been encountered by individuals and agencies involved in the appraisal of federally funded programs of this type. Some of the problems have been mentioned in the body of the current report. In spite of these difficulties, it is believed advisable that, on the basis of our findings, certain recommendations be made. Therefore, within the scope of this study and with awareness of its limitations, the following recommendations are made for your consideration.

First, it is suggested that a reading program be operated in the Montgomery County schools. This recommendation is made on the basis of the large percent of students performing below the national norms. Citing percent of students below the national norms is not intended as a indictment against the school system of Montgomery County. It is merely a statement of conditions as they exist and offered as evidence for the necessity of the program.

It is recommended that program effort be concentrated in a more limited range of grades. This recommendation is made because it is believed the decreased support of the federal funding agency will not allow a program to encompass the entire period of a student's education. Furthermore, evidence in the report suggests the broad program covering nine grades has not achieved great success in raising the reading level of students in the program. While it is possible that greater success may be achieved with additional funds, it is unlikely, under the present program, that greater success will be attained with less money. Therefore, it is suggested that the scope of the program be trimmed to include a limited educational time period.

The implementation of the recommendation of concentration of effort has been attained and currently only the first three grades receive reading instruction. It should be mentioned, however, that the findings in this report indicate more program success at the upper-grade levels than at the lower ones. The decision as to where to concentrate the effort rests with the school system. There is the sound logic of a preventative philosophy of having the program at the lower grades; but the evidence supports a program for the upper grades. If additional funds can be secured, it is suggested that the program be extended.

A major recommendation that the evaluators of the reading program make is that greater attention be given to the selection and training of reading teachers. Again, the evaluators do not question the enthusiasm or dedication of the reading teachers, and it is recognized that occasionally an excellent teacher with little training in reading may be obtained by the system. However, it is believed that more diligent effort should be expended to locate qualified teachers who have had advanced training in reading. More than one-half of the teachers in the program had only one, or no, courses in reading. Many of the teachers were not professionally trained for work with elementary students. Such individuals appear ill-equipped to work with children with special difficulties. If teachers with reading specialities cannot be acquired, then inservice training should be provided, using either reading specialists in the county system or outside consultant experts in reading.

Reading teachers should be selected from among individuals who are likely to remain with the program. At the end of the 1968-69 school year, 13 of the 18 reading teachers left the program. If the program is to be effective, it would appear that more permanence of the members of the staff is needed. Using the reading program as a screening device or as a stepping stone to become a regular classroom teacher is viewed with disfavor.

The reinstatement of discontinued health services to children in the program and the implementation of other similar services is recommended. Such things as medical examinations, dental care, vitamins, orange juice, and lunches may help in improving the attendance of children in the program. In view of the fact that the cognitive efforts of the program have not been highly successful, the provision of health services would appear to be a wise use of some of the money obtained from Title I Services.

We would advise that every effort be made to involve the parents of Title I children in the program to a greater degree. Our observation of parental participation disclosed that it was minimal and that no concentrated effort was being made to involve parents. It is felt that the success students have in the program is somewhat dependent on parental enthusiasm. Therefore, it is suggested that parents' cooperation be elicited either at school or in the home.

It is suggested that those who have the responsibility for directing the reading program explore new techniques and methods for use with reading. This may involve the utilization of methodology already in existence or the development of new material. Regardless, experimentation with different methods of reading seems indicated in view of limited success of the current program. The extent of this experimentation is left to the discretion of the system.

It is recommended that the funding agency notify the local school systems as far in advance as possible of the funds that will be available to them. Much of the negative criticism leveled by the evaluators might never have been made if those responsible for planning and implementing the program had received some indication of the resources available for the program. In other words, more time would have been available to recruit staff, purchase equipment, investigate programs, etc.

It is suggested that future programs evaluation be preplanned so that adequate controls can be established and more confidence placed in the evaluation results. The evaluators emphasize that because of the lack of rigid experimental methodology, the current findings should not be considered conclusive.

In addition we would recommend that some time be set aside for instruction of the reading teachers in how to record student test scores and other pupil data. Much of the time of those involved in the evaluation proceeding was spent in recording existing records.

Finally we commend the efforts of those involved in the program. We found able and dedicated staff who gave unselfishly of themselves for the program. We received excellent cooperation from staff members and school personnel. Enthusiasm by program personnel for their work was high and we believe this to be an asset of the program. Similarly, approval by many other school personnel in Montgomery County was high and is a reason for continuing the reading program.